

In the Claims

1 – 31 (Cancelled)

32. (New) A filter retrieval system comprising:
a catheter including an elongate shaft having a proximal end, a distal end, and a wall defining a shaft lumen;
a proximal guidewire port disposed distal of the proximal end of the elongate shaft;
a generally conical tip disposed near the distal end of the elongate shaft, the conical tip having an aperture defining a distal guidewire port;
a guidewire extending through the distal guidewire port and the proximal guidewire port; and
a filter disposed on the guidewire.

33. (New) The system of claim 32, wherein the generally conical tip comprises a flexible tip member.

34. (New) The system of claim 33, wherein at least a portion of the flexible tip member is disposed within the shaft lumen.

35. (New) The system of claim 33, wherein the flexible tip member is moveable relative to the elongate shaft.

36. (New) The system of claim 35, wherein the flexible tip member moves between an extended position and a retracted position.

37. (New) The system of claim 32, wherein the generally conical tip has a generally tapered shape.

38. (New) The system of claim 32, wherein the generally conical tip comprises a flexible material allowing deflection of the generally conical tip.

39. (New) The system of claim 32, wherein the generally conical tip folds proximally as the filter passes through the aperture of the generally conical tip.

40. (New) The system of claim 32, wherein the generally conical tip expands radially as the filter passes through the aperture of the generally conical tip.

41. (New) The system of claim 33, wherein the elongate shaft further comprises a proximal stop mechanism disposed in a distal portion of the shaft lumen.

42. (New) The system of claim 41, wherein the proximal stop mechanism limits retraction of the flexible tip member within the shaft lumen.

43. (New) The system of claim 41, wherein the flexible tip member seats against the stop mechanism when the tip member is in a retracted position.

44. (New) The system of claim 41, wherein the proximal stop mechanism comprises a stop member.

45. (New) The system of claim 41, wherein the proximal stop mechanism comprises an annular bead.

46. (New) The system of claim 41, wherein the proximal stop mechanism comprises a flange.

47. (New) A catheter system for retrieving a filter, comprising:
an elongate shaft having a proximal end, a distal end, and a wall defining a shaft lumen, the shaft lumen sized to accommodate a filter;

a proximal guidewire port disposed distal of the proximal end of the elongate shaft; and

a generally conical tip having an aperture defining a guidewire port connected to a portion of the elongate shaft proximate the distal end of the elongate shaft.

48. (New) The system of claim 47, wherein the generally conical tip comprises a flexible tip member.

49. (New) The system of claim 48, wherein at least a portion of the flexible tip member is disposed within the shaft lumen.

50. (New) The system of claim 48, wherein the flexible tip member is moveable relative to the elongate shaft.

51. (New) The system of claim 50, wherein the flexible tip member moves between an extended position and a retracted position.

52. (New) The system of claim 47, wherein the generally conical tip has a generally tapered shape.

53. (New) The system of claim 47, wherein the generally conical tip comprises a flexible material allowing deflection of the generally conical tip.

54. (New) The system of claim 47, wherein the generally conical tip folds proximally as a filter is urged through the aperture of the generally conical tip.

55. (New) The system of claim 47, wherein the generally conical tip expands radially as a filter is urged through the aperture of the generally conical tip.

56. (New) The system of claim 48, wherein the elongate shaft further comprises a proximal stop mechanism disposed in a portion of the shaft lumen.

57. (New) The system of claim 56, wherein the proximal stop mechanism limits retraction of the flexible tip member within the shaft lumen.

58. (New) The system of claim 56, wherein the flexible tip member seats against the stop mechanism when the tip member is in a retracted position.

59. (New) The system of claim 56, wherein the proximal stop mechanism comprises a stop member.

60. (New) The system of claim 56, wherein the proximal stop mechanism comprises an annular bead.

61. (New) The system of claim 56, wherein the proximal stop mechanism comprises a flange.

62. (New) The system of claim 47, further comprising:
a means for grasping a guidewire.

63. (New) The system of claim 62, wherein the means for grasping a guidewire comprises a wire gripper.

64. (New) The system of claim 63 wherein the wire gripper comprises a plurality of jaws for grasping a guidewire.

65. (New) The system of claim 62, further comprising:
a hub disposed about a portion of the elongate shaft proximate the proximal end;
and
a slider disposed within a portion of the hub, wherein the slider includes the means for grasping a guidewire.

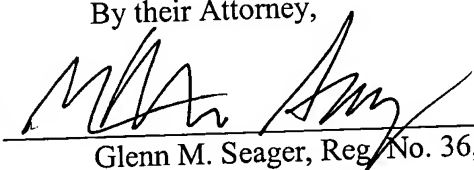
66. (New) A filter retrieval system comprising:
a catheter including an elongate shaft having a proximal end, a distal end, and a wall defining a shaft lumen;
a proximal guidewire port disposed distal of the proximal end of the elongate shaft; and
a generally conical tip disposed near the distal end of the elongate shaft, the generally conical tip having an aperture defining a distal guidewire port, wherein the generally conical tip is displaced upon introducing a filter within the shaft lumen.

Respectfully submitted,

SCOTT M. HANSON ET AL.

By their Attorney,

Date: Sept. 17, 2003


Glenn M. Seager, Reg. No. 36,926
Customer No. 28075
CROMPTON, SEAGER & TUFTE, LLC
1221 Nicollet Avenue, Suite 800
Minneapolis, Minnesota 55403-2420
Tel: (612) 677-9050
Fax: (612) 359-9349